# Case study University of Salford



## At a glance

When the University of Salford opted for a new campus on the MediaCityUK site at Salford Quays, they had in mind a campus with state-of-the-art technology specified by industry as well as future proofed for emerging creative technologies. A central MAM platform was to be at the heart of the newly established workflow while high-end Rohde&Schwarz DVS equipment was placed in strategic positions: Five R&S®VENICE ingest and production servers – providing a total of 20 channels – ensure reliable and flexible studio capture and playout. The infrastructure is also offering a solid foundation for the University's future expansion.



Photo: flickr



University of Salford

30 Schwarz DVS GmbH 09.2014-<1.0</pre>

#### University of Salford

## About University of Salford

The University of Salford is a campus university based in Salford, Greater Manchester, England, with approximately 20,000 registered students. The main campus is about 1.5 miles (2.4 km) west of Manchester city centre. With the opening of a new campus on the MediaCityUK site at Salford Quays in October 2011, the University of Salford became the only university to have a presence at this unique place at the heart of the media industry. Working closely with the BBC and other digital and creative industries, the Univeristy's researchers, students and graduates are helping to shape the future of the media sector in the UK. The location, state-of-the-art facilities and the focus on industrial partnerships provide the 1,500 students with exceptional opportunities, placing them in prime position for digital and media careers.

## Challenge



#### Photo: flickr

The University of Salford was looking for state-ofthe-art equipment that would offer students the opportunity to realize film and TV projects using professional equipment. This also made it necessary to employ technology which is subject to continuous further development, for example by expanding the portfolio of supported codecs. The overall system architecture was to enable multi-tenancy sharing of services while it had to be expandable anytime for adding further systems. A main requirement on the ingest and production servers was their native support of AVC-Intra Class 100 and Sony XDCAM® DV 25 as these were chosen as the canonical formats within the MAM. The easy integration of the VENICE systems into the workflow was also an essential requirement in order to provide seamless workflows enabling smooth production. Another crucial need was the flexible allocations of channels needed for ingest and playout.

### Solution



Photo: flickr

Mediasmiths International Ltd (MS), an international media consultancy and software integrator, was commissioned to develop a custom MAM solution at the University of Salford. Working closely with the international broadcast systems integrator Television Systems Ltd (TSL), responsible for the traditional broadcast equipment installation and fit out on the project, and root6, a committed supplier of technology to the UK broadcast communities, they delivered the shared media infrastructure across multiple platforms called for at the University.

The MAM system which sits above a central storage solution was placed in the centre of the system architecture. Five VENICE ingest and production servers from Rohde&Schwarz DVS GmbH were integrated into the infrastructure at the University of Salford, they were chosen for their ability to record and play out multiple channels of AVC-Intra. The overall MAM solution requirement was for 10 channels record and 10 channels playout split across the three studios at the University. Each studio controls its assigned channels from the VENICE GUI. VENICE enables capture and playout at all crucial points of the production chain. The flexibility of VENICE allowed the optimum allocation of video channels between the University's different studios in order to meet the changing needs for ingest and playout channels.



Photo: flickr

#### University of Salford



## Workflow setup

The five VENICE ingest and production servers provide a total of 20 channels which are used for key tasks such as studio recording and playout. Students planning their projects and program tasks first select and allocate the required settings using the VENICE GUI to set: project folder to record to, record format and clip format.

Content derived from different matrix sources is ingested via 10 channels of the VENICE systems which manage native capturing to the required format. The flexibility of VENICE allows the optimum allocation of video channels to meet the changing needs for ingest and playout. The material is captured to the pre-selected MAM project in either HD or SD and is stored on the MAM central storage. All MAM workstations are also connected to the central storage solution and have direct access to the saved data. Two VENICE playout channels – controlled via VDCP – are used for the news and studio playout. Students schedule their program content in the iNews NRCS. The playout channels are controlled by iNews Command under VDCP control. Rundowns are sent to VENICE from iNews. Once the content is available in the rundown, the students can control the playout of the material from iNews. VDCP is used for the NRCS playout communiation. All imported material from either VENICE or other media sources is stored on the MAM central storage. There is no need to transfer the data for further editing thus elimaniting a loss of quality. All content is delivered to the VENICE channels as AVC-Intra OP-Atom.

For manual playout using the VENICE playlist, the students may add MAM content to a temporary playlist folder. This content may then be added to the VENICE playlist, and is controlled from the VENICE GUI.



Photo: flickr



Photo: flickr

#### About Rohde & Schwarz DVS

For more than 25 years, Rohde & Schwarz DVS GmbH has been very successful in the professional film, video post production and broadcast markets. The specially developed and manufactured hardware and software are applied to the production of popular TV series, Hollywood blockbusters and in Digital Cinema. R&S®CLIPSTER was the first system in the world to make realtime 4K processing possible. The future-proof ingest and production server R&S®VENICE offers a flexible solution for modern, file-based workflows in broadcast environments.

www.dvs.de

#### **Regional contact**

Europe, Africa, Middle East +49 1805 12 42 42\* or +49 89 4129 137 74 customersupport@rohde-schwarz.com

North America 1-888-TEST-RSA (1-888-837-8772) customer.support@rsa.rohde-schwarz.com

Latin America +1-410-910-7988 customersupport.la@rohde-schwarz.com

Asia/Pacific +65 65 13 04 88 customersupport.asia@rohde-schwarz.com

This application note and the supplied programs may only be used subject to the conditions of use set forth in the download area of the Rohde & Schwarz website.

Copyright © 2014, all contents by Rohde&Schwarz DVS GmbH. Specifications and data are subject to change without notice. Some features may be part of optional or future packages. All trademarks used herein, whether recognized or not, are the properties of their respective owners. R&S<sup>®</sup> is a registered trademark of Rohde & Schwarz GmbH & Co. KG

Rohde & Schwarz DVS GmbH Krepenstr. 8 | D-30165 Hannover Phone +49 511 67 80 70 | Fax +49 511 63 00 70 www.rohde-schwarz.com | www.dvs.de